Space and Missile Systems Center (SMC)
Chief Engineers' Council (CEC)
CHARTER

I. PURPOSE

A. The SMC Chief Engineers' Council (CEC) is hereby chartered as the technical arm for the Senior Leadership Council (SLC) to integrate engineering activities across SMC SPOs and staff, SMC Detachment 10, Phillips Laboratory and The Aerospace Corporation to create opportunities for technical integration of programs from a commonality and interoperability standpoint. SMCR 800-24, "Space Systems Engineering", requires the implementation of a systems engineering process for the "SMC System" which encompasses the entire mission of SMC as a total, integrated system. The three major elements of the SMC System include space, launch and ground systems. Each individual program (i.e., DSP, GPS, DMSP, Titan IV, ARTS, etc.) is a part of the entire System. Key elements of SMC systems engineering include multi-program projects (e.g., projects beneficial to more than one program), standardization opportunities, interoperability opportunities and design options to be used in satisfying future customer requirements. Three Integrated Product Teams (IPTs), one each for space, launch and ground systems, are responsible for ensuring systems engineering requirements are met for their respective element. The SMC CEC will act as the IPT responsible for integrating the systems engineering activities that span the space, launch and ground systems.

B. In addition to the above systems engineering responsibilities, the CEC will also act as the SMC Center Technology Council (CTC) and Engineering Validation Team (EVT).

II. STRUCTURE

A. Chair - The CEC and CTC will be co-chaired by the SMC Chief Engineer (SMC/EN) and The Aerospace Corporation Chief Engineer and will consist of the Chief Engineer representatives from all Systems Program Directors and their Aerospace Corporation counterparts, AFSPACECOM liaison representatives and representatives from AL, XR, SD, Detachment 10, Phillips Laboratory, The Aerospace Corporation Engineering & Technology Group (ETG) and TRW (the Detachment 10 SETA). The Aerospace Corporation and TRW members will only act in an advisory capacity in all activities associated with the CEC and CTC.

B. Executive Steering Group - The Executive Steering Group will be co-chaired by the SMC Chief Engineer (SMC/EN) and The Aerospace Corporation Chief Engineer and will consist of representatives from CL, CU, CW, MG, AL, SD, XR and PL. The Executive Steering Group will be responsible for managing the activities of the CEC, including establishing CEC work groups and assigning project OPRs. The Aerospace Corporation member of the Executive Steering Group will only act in an advisory capacity.

C. Center Technology Council (CTC) - The CTC co-chairs and membership are described in II.A above. The CTC is responsible for technology transition, technology insertion and technology capability assessment activities as described in III.B below.

D. Engineering Validation Team (EVT) - Chaired by EN, the EVT membership is comprised of selected members of the CEC. The EVT is charged with assessing the maturity of pervasive and infrastructure technologies and tools being requested or proposed and the associated risk of application for the intended use. The Aerospace Corporation and TRW members of the EVT will only act in an advisory capacity.

E. Secretariats - The Secretariat function for the CEC will reside within the SMC Systems Engineering Division (SDE). The Secretariat function for the CTC will reside within the SMC Directorate of Developmental Planning (XR). The Secretariats are charged with the responsibility for scheduling meetings, proposing agendas, issuing project calls and administering the operation of the CEC and CTC.

III. OPERATION

A. To be effective in implementing their systems engineering responsibilities, the members of the CEC must be empowered to make technical decisions on behalf of their Systems Program Directors or two-letter organizations. They must be able to act on behalf of the System Program Directors in providing concurrence on approaches to resolve technical issues. The CEC members are hereby empowered to accomplish the following for those projects specifically undertaken by or delegated to the CEC:

1. Approve technical approaches to resolve common problems.

2. Cancel multi-program CEC engineering projects that are not meeting their exit criteria.

B. The SMC CTC will accomplish the following:

1. Prioritize and oversee technology activities as a single point of contact for the (Center.

2. Provide a mechanism to establish priorities, provide individual project oversight and reporting, and plan a balanced resources application required to execute technology insertion projects.

3. Review the technology being transit to or inserted in an operational system.

4. Perform independent assessments of technology maturity for transition/insertion to new or fielded systems.

5. Formally assess SMC's technological capabilities and forecast current and future requirements in consonance with the users' Mission Area Plans (MAPs) Roadmaps and SMC's

Technical Planning Integrated Product Teams (TPIPTs) Mission Area Developmental Plans for concepts, systems and technologies.

6. Look across SMC and aggregate those infrastructure needs that can be met by technology solutions.

C. Engineering Validation is a new process that will assess a technology's readiness for insertion, to be performed at each AFMC Center. The purpose of Engineering Validation is to establish success criteria and assess the maturity or risk of technologies developed in DoD laboratories and industry for potential insertion into new or fielded systems. Specified members of the CEC will comprise the Engineering Validation Team (EVT) and accomplish the following:

1. Review and validate all space and missile related technology developed by Air Force laboratories prior to insertion/application in a new/fielded system or command infrastructure.

2. At the request of the System Program Director, review and validate commercially developed technology when the sponsoring System Program Director decides that the commercial validation process might not assure Air Force requirements are met.

3. Ensure that requirements for funds under the oversight of the TTO and executed by the CTC are supported by documentation substantiating engineering validation of the technologies involved.

D. The CEC Chairperson will call meetings as required to support the IPTs, CTC and EVT activities described herein. The Chairperson will give two weeks advance notice of meetings. Material on which a decision will be required at the meeting will be provided with the notice. All other material will be provided at the meeting.

APPROVED:

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(*SIGNATURE) (DATE)*
E. C. ALDRIDGE, JR
President and CEO
The Aerospace Corp

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(*SIGNATURE) (DATE)*
GARRY A. SCHNELZER
Major General, USAF
Air Force Prograrn Executive Officer for Space

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(*SIGNATURE) (DATE)*
EUGENE L. TATTINI
Brigadier General, USAF
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